

*Dedicated to People Flow™*



OPTIONS AND PLANNING DIMENSIONS

# KONE TravelMaster™ 110 escalators

# KONE TravelMaster™ product range

Well designed and manufactured escalators are a must for today's highly demanding public areas. They are key to ensuring the smooth, efficient and safe flow of people traveling within a building's environment.

KONE prides itself on delivering the "low risk" option to customers. We offer "peace of mind" in terms of product design, customer support and project management, combined with the highest levels of efficiency and safety during the installation phase.

**The versatile KONE TravelMaster escalator range is ideal for new installations, and incorporates two specific models:**

- TravelMaster 110 escalator
- TravelMaster 115 inclined autowalk

Each one is specifically designed to meet the exact demands and needs of the market sector, whether it's a low rise retail escalator you are looking for, or a mass transit airport or railway station system.

# TravelMaster™ 110 – the best solution for commercial buildings

The KONE TravelMaster 110 is a commercial escalator targeted primarily towards the retail segment – supermarkets, hypermarkets, department stores and shopping centers. Here it is part of the total KONE solution offering together with other KONE products such as:

- Commercial inclined autowalks ----- e.g. KONE TravelMaster 115
- Passenger elevators ----- e.g. KONE MonoSpace
- Goods elevators ----- e.g. KONE TranSys
- Scenic elevators ----- based on KONE MonoSpace or KONE MonoSpace Special
- Automatic building doors

Secondary focus areas for the KONE TravelMaster 110 include airports, hotels, hospitals and offices.

It is designed, from both a technical and visual point of view, to fulfill the main customer requirements of the target segments:

- Cost competitiveness
- High quality in terms of technical performance and visual appearance
- Large standard offering with some engineering flexibility
- Elegant and modern design

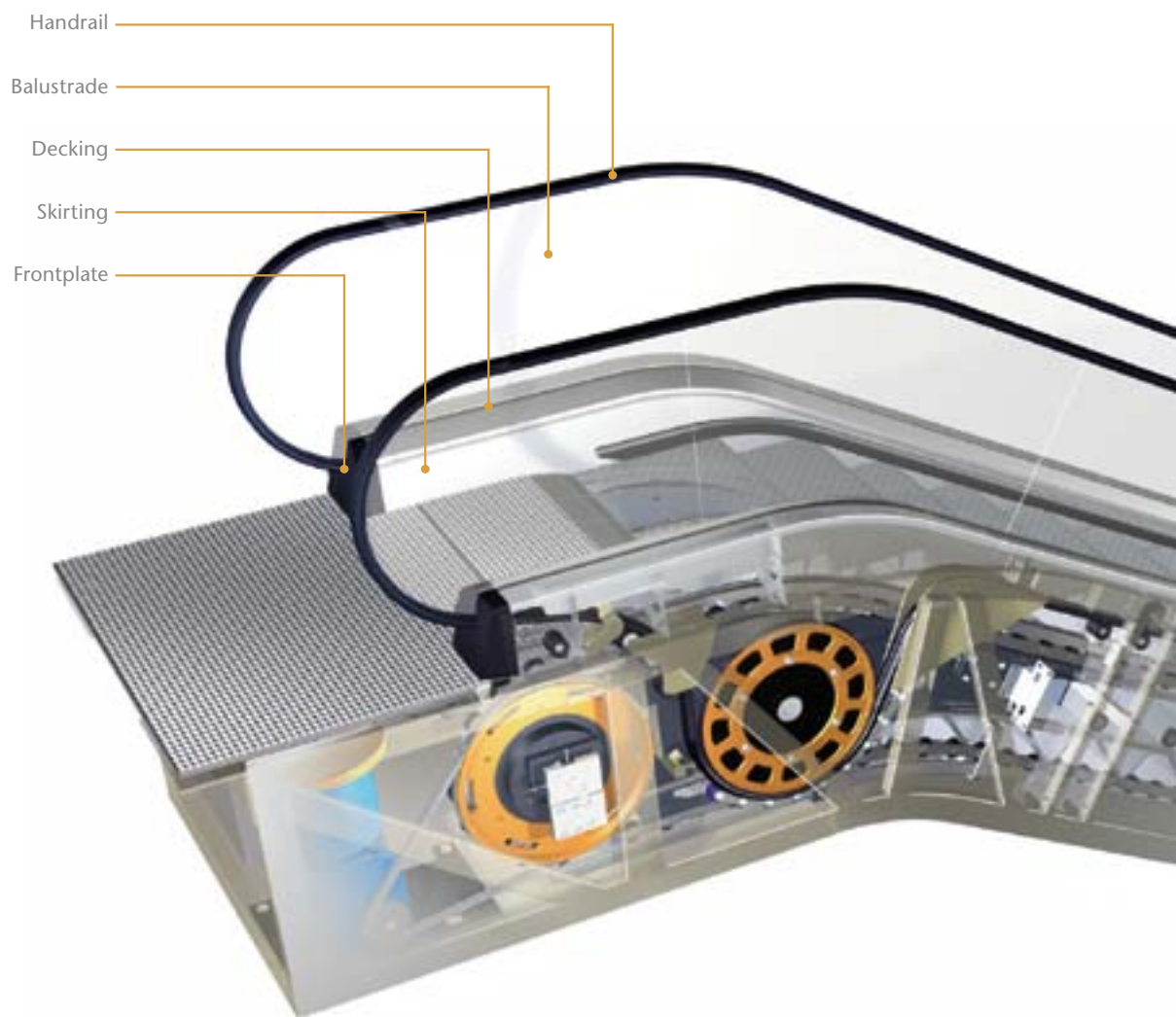
## Overview of technical specifications

KONE TravelMaster 110 basic data	
Inclination	30° or 35°
Horizontal steps	2/2, 3/3
Transition radii (top/bottom)	1.0/1.0 and 1.5/1.0
Maximum rise	9.5 m
Operational environment	Indoor, semi-outdoor, full-outdoor
Step width	600 mm, 800 mm, 1000 mm
Balustrade type	10 mm tempered glass with slim handrail profile
Balustrade height	Standard: 900 mm, Optional: 1000 mm/1100 mm
Speed	0.5 m/s
Step chains	Inside roller chains
Duty cycle	Up to 12 hours/day
Typical service life	100,000 hours

# Eco-efficiency

KONE firmly believes that sustainable buildings are our future. We are committed to helping customers achieve their environmental objectives by providing environmentally responsible products and services.

- Stand-by speed operation reduces the escalator speed when no passengers are traveling, thus further reducing energy consumption and increasing equipment lifetime.
- The possibility for a lubrication-free step chain means no oil, a cleaner escalator and environment, reduced fire hazard, simpler cleaning and easier maintenance.
- Escalator packaging and timber protection are examples of our commitment to using wood taken from sustainable forests.
- At the end of March 2008, 90% of our production operations were certified according to the ISO 14001 standard.

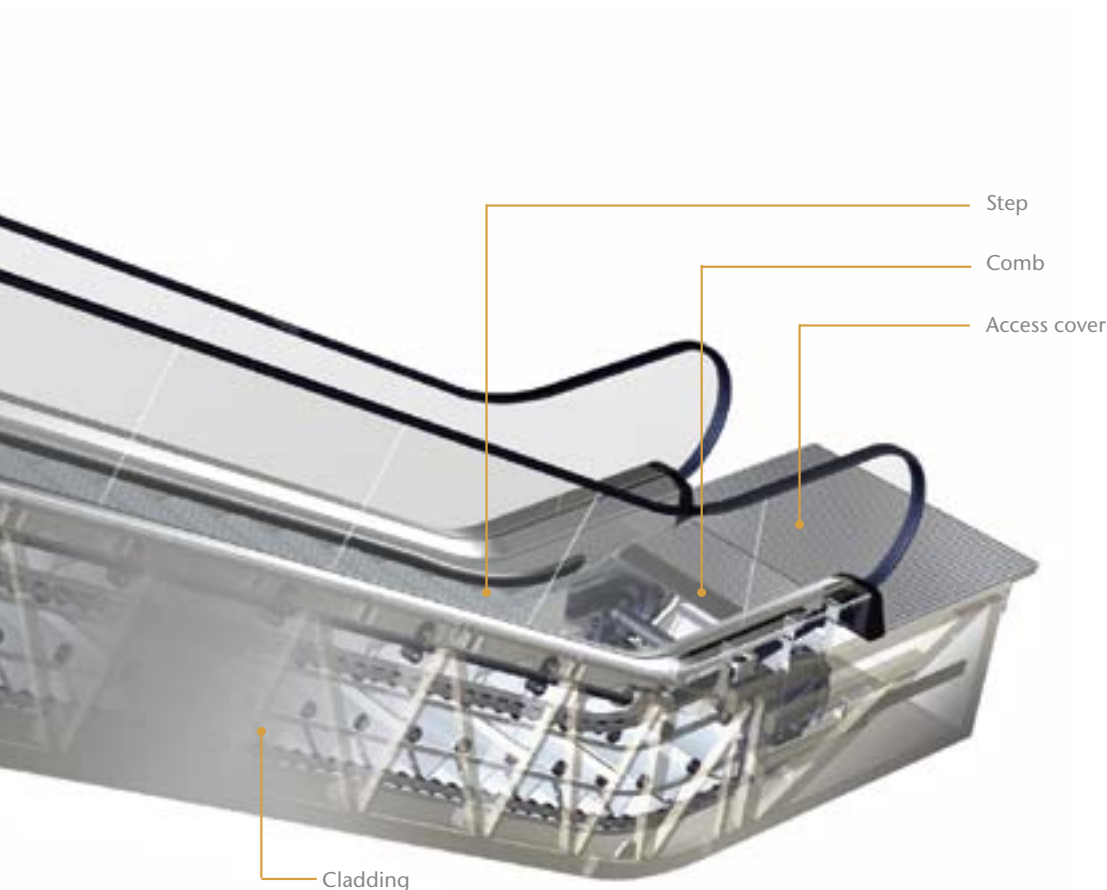


# Safety options

The standard safety features of the KONE TravelMaster 110 according to the EN 115-1:2008 safety code are the following:

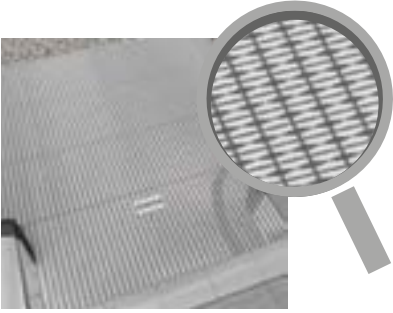
- Emergency stop buttons for passengers in the top left and bottom right handrail inlet front plates
- Broken step chain (chain tension) switches in the return station which stop the escalator in case of failure of the step chain
- Handrail inlet switches with contacts at the handrail inlets into the balustrade heads
- Comb plate impact device switches which stop the escalator in case objects become trapped between the comb teeth and the moving step band
- Step sag switches, which stop the escalator if a step sags by more than 5 mm before it enters the comb
- Step guards at the top and bottom
- Step band locking device
- Speed sensor system, which electronically monitors the motor for over/under speeds and step band reversal
- Motor thermal protection for temperature monitoring
- Main switch with thermal and magnetic release
- Stop switches for engineers' use within upper and lower end pits
- Sockets for inspection use installed in the upper and lower machine compartments
- Skirt deflector brushes
- Access cover contacts
- Handrail speed monitor
- Missing step monitor

Other safety and monitoring functions, such as KONE Remote Monitoring and E-link, are available on request.

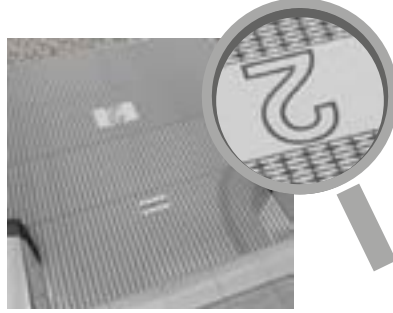


# Visual options

## Access cover



Stainless steel with black grooves



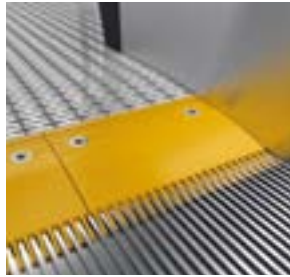
Access cover with floor number

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## Comb



Aluminium comb segments



Yellow plastic comb segments



Black plastic comb segments

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## Balustrade



Clear glass balustrade panels

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## Balustrade joints



As standard, joints between glass balustrade panels are arranged perpendicular to the truss. Inclined panels are 1200 mm wide except for one make-up panel at the upper end which is used to compensate for the vertical rise.



As an option, the inclined panel widths can be equalized with joints arranged perpendicular to the floor or the truss.

## Frontplate



Black plastic



Satin polished stainless steel

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## Handrail



Black



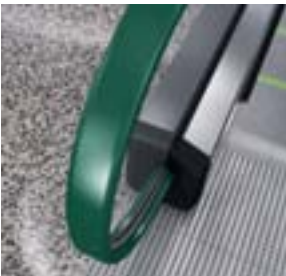
Black with white demarcation inserts



Red



Blue



Green



Brown



Beige



Grey

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## Decking



Silver powder coating (RAL9007)



Brushed satin stainless steel



Center decking

## Skirt



Sheet steel skirt with black anti-friction coating



Brushed satin stainless steel skirt with clear anti-friction coating

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## Step color



Silver aluminium



Black color aluminium with metal color ribs

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## Step demarcation



Yellow painted (RAL1004)



Yellow plastic insert (RAL1023)

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## KONE MovingMedia™ step



MovingMedia distribution:  
One sign on every step, every six steps or as specified by customers



## Lighting



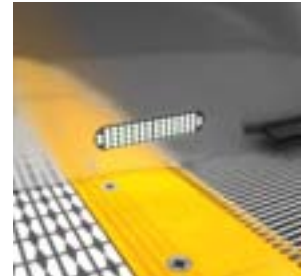
Continuous fiber optic handrail lighting



LED skirt spotlighting



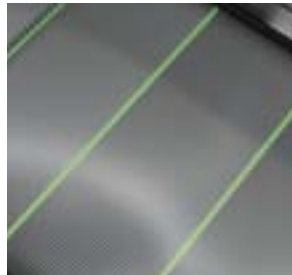
Continuous fiber optic skirt lighting



LED comb lighting



Traffic lights located in the decking



Under step demarcation lighting

## Cladding



Grey primed sheet steel cladding (RAL7036) \*



Grey powder coated sheet steel cladding (RAL7036)\*\*\*\*\*



Brushed satin stainless steel cladding \*\*\*\*\*



Glass side cladding \*\*/\*\*\*\*



Side cladding fitted by the customer \*\*\*\*

### Note:

- \* If needed this can be used for local on site decoration.
- \*\* It is recommended to have a lubrication-free chain with glass side cladding. Options such as a painted truss in various colors as well as internal lighting are available.
- \*\*\* Glass cladding is not available for outdoor application.
- \*\*\*\* The truss is designed to allow a maximum weight of 15 kg/m<sup>2</sup>.
- \*\*\*\*\* Cladding joints perpendicular to truss and floor available.

## Horizontal steps



2 horizontal steps



3 horizontal steps



Diagnostics display

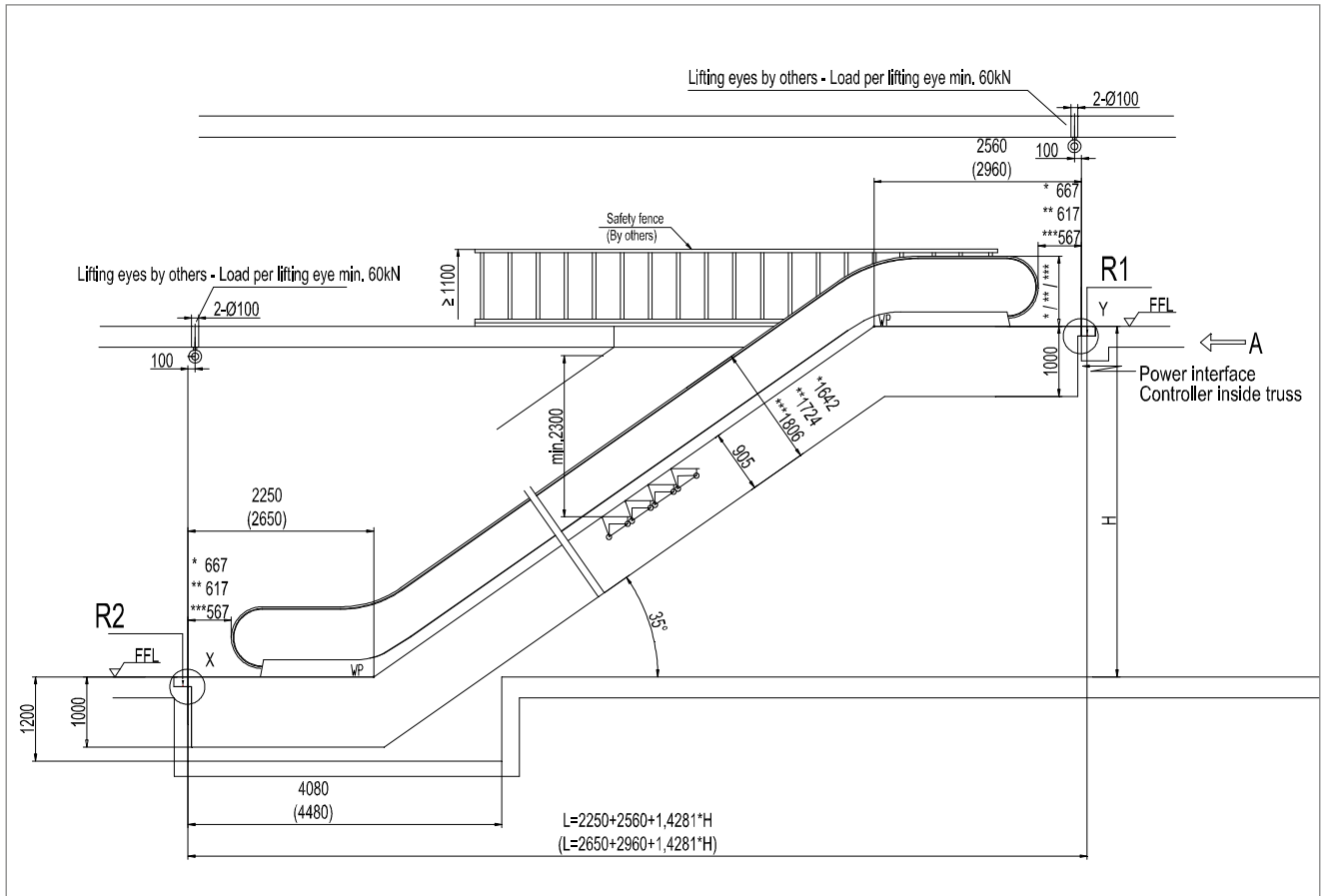
Note: If the vertical rise exceeds 6 m or the step speed exceeds 0.5 m/s, there must be a minimum of 3 horizontal steps at each landing (EN 115 compliance).

# KONE TravelMaster™ 110 planning dimensions

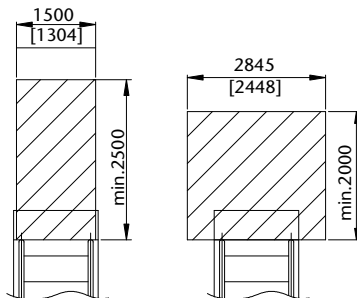
Architectural planning data

**35° inclination / 1.0 transition radii / 2 or 3 horizontal steps at each landing**

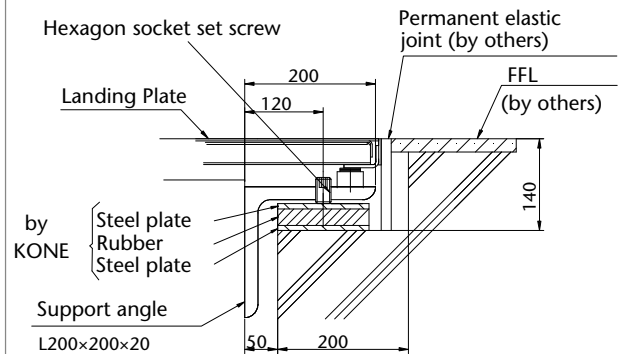
Code: EN 115-1:2008<sup>1)</sup>



Passenger Circulation Area Requirements



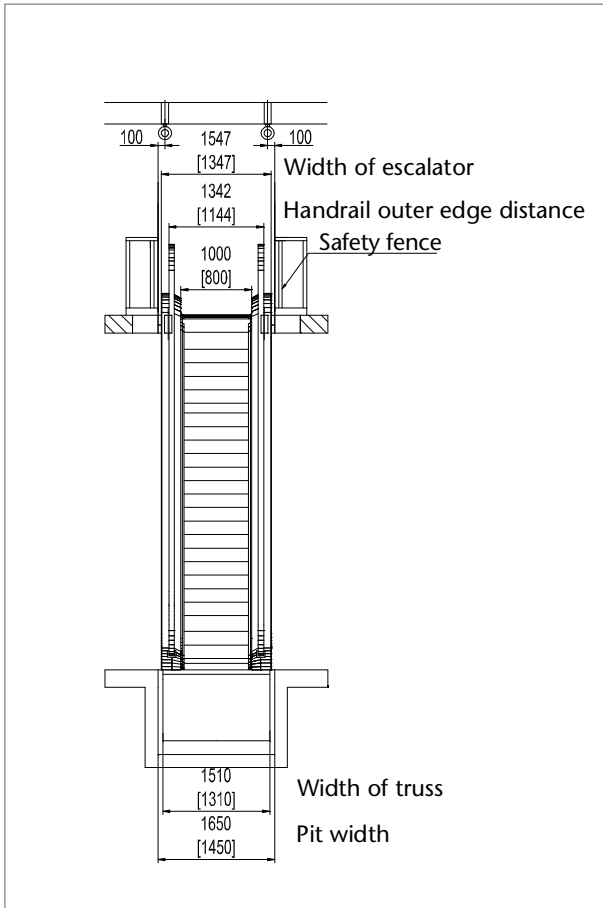
Detail Y (Mirror image of X)



Reaction force (kN)

	800 mm step width		1000 mm step width	
2 steps	$R1=4.8L/1000 + 11$	$R2=4.8L/1000 + 2.5$	$R1=5.5L/1000 + 11$	$R2=5.5L/1000 + 2.6$
3 steps	$R1=4.8L/1000 + 11.3$	$R2=4.8L/1000 + 3.1$	$R1=5.5L/1000 + 11.9$	$R2=5.5L/1000 + 3.3$

<sup>1)</sup> Other local codes dimensional requirements are available upon request, please contact your local KONE Sales representative for more information.



- All dimensions are in millimeters
- Maximum vertical rise: H = 6000 mm
- Upper truss extension maximum 700 mm
- Lower truss extension maximum 700 mm
- Additional cladding material maximum 15 kg/m<sup>2</sup>
- (XXX) = Three horizontal steps
  - \* = Balustrade height 900 mm
  - \*\* = Balustrade height 1000 mm
  - \*\*\* = Balustrade height 1100 mm
- (XXX) = Step width 800 mm
- For escalator with step width of 600 mm please contact your KONE sales office

Note:

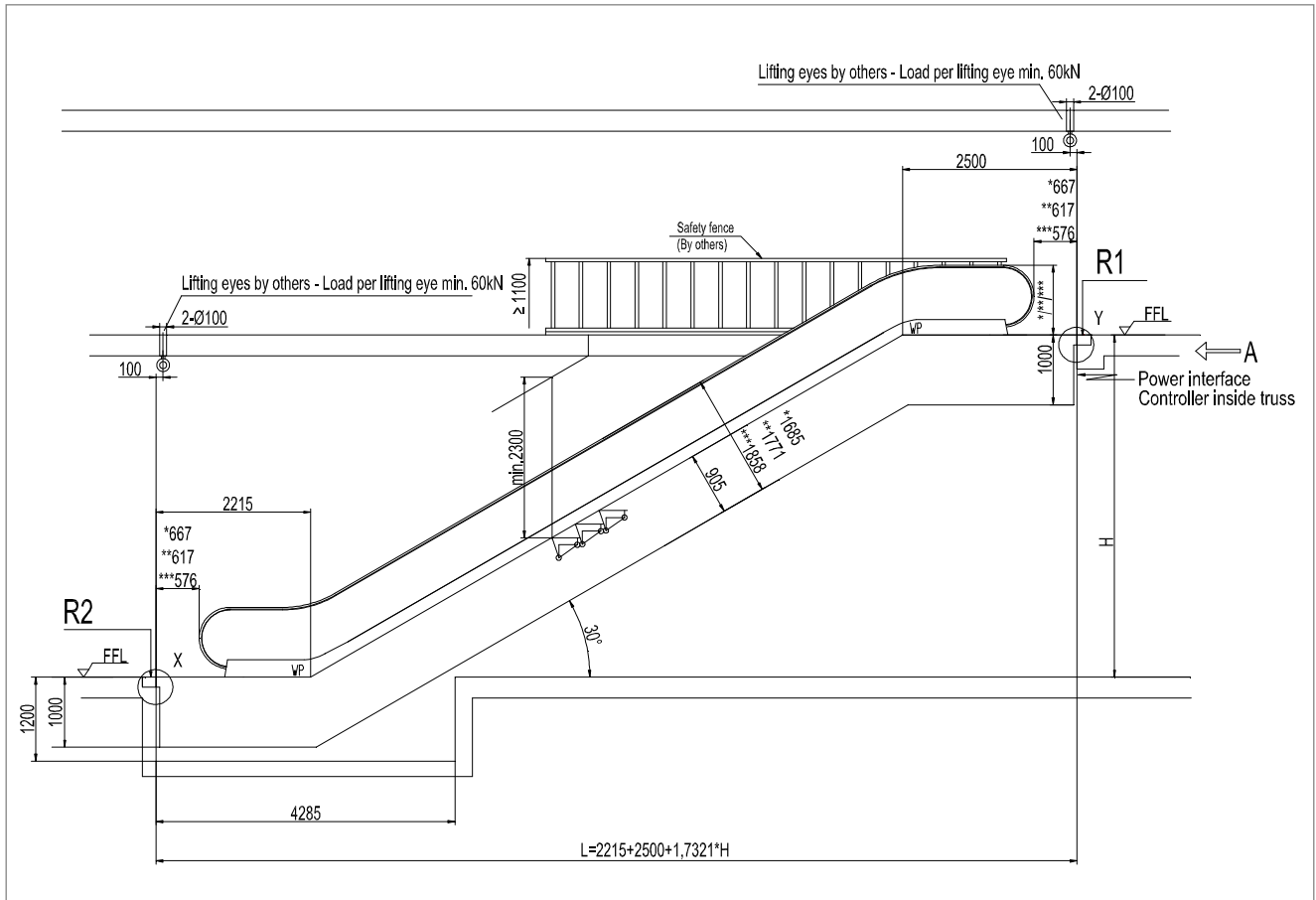
If you would like to obtain the exact dimensions for your specific project, we recommend you use the Escalator Design Tools, which can be found within the InfoPack.

# KONE TravelMaster™ 110 planning dimensions

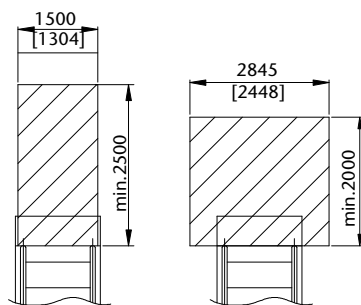
Architectural planning data

**30° inclination / 1.0 transition radii / 2 horizontal steps at each landing**

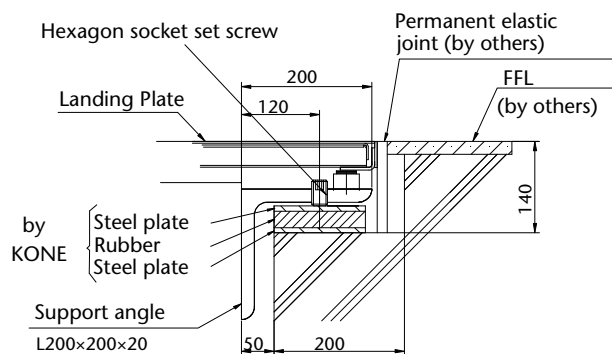
Code: EN 115-1:2008<sup>1)</sup>



Passenger Circulation Area Requirements



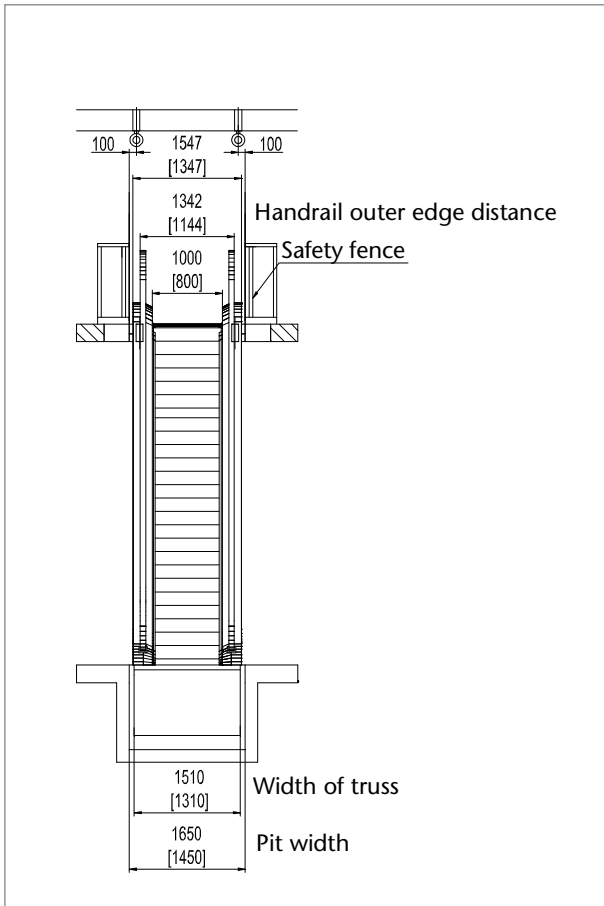
Detail Y (Mirror image of X)



Reaction force (kN)

	800 mm step width		1000 mm step width	
2 steps	$R1 = 4.8L/1000 + 10.4$	$R1 = 4.8L/1000 + 2.5$	$R1 = 5.5L/1000 + 11$	$R2 = 5.5L/1000 + 2.6$

<sup>1)</sup> Other local codes dimensional requirements are available upon request, please contact your local KONE Sales representative for more information.



- All dimensions are in millimeters
- Maximum vertical rise:  $H = 6000$  mm
- Upper truss extension maximum 700 mm
- Lower truss extension maximum 700 mm
- Additional cladding material maximum  $15 \text{ kg/m}^2$ 
  - \* = Balustrade height 900 mm
  - \*\* = Balustrade height 1000 mm
  - \*\*\* = Balustrade height 1100 mm
- (XXX) = Step width 800 mm
- For escalator with step width of 600 mm please contact your KONE sales office

Note:

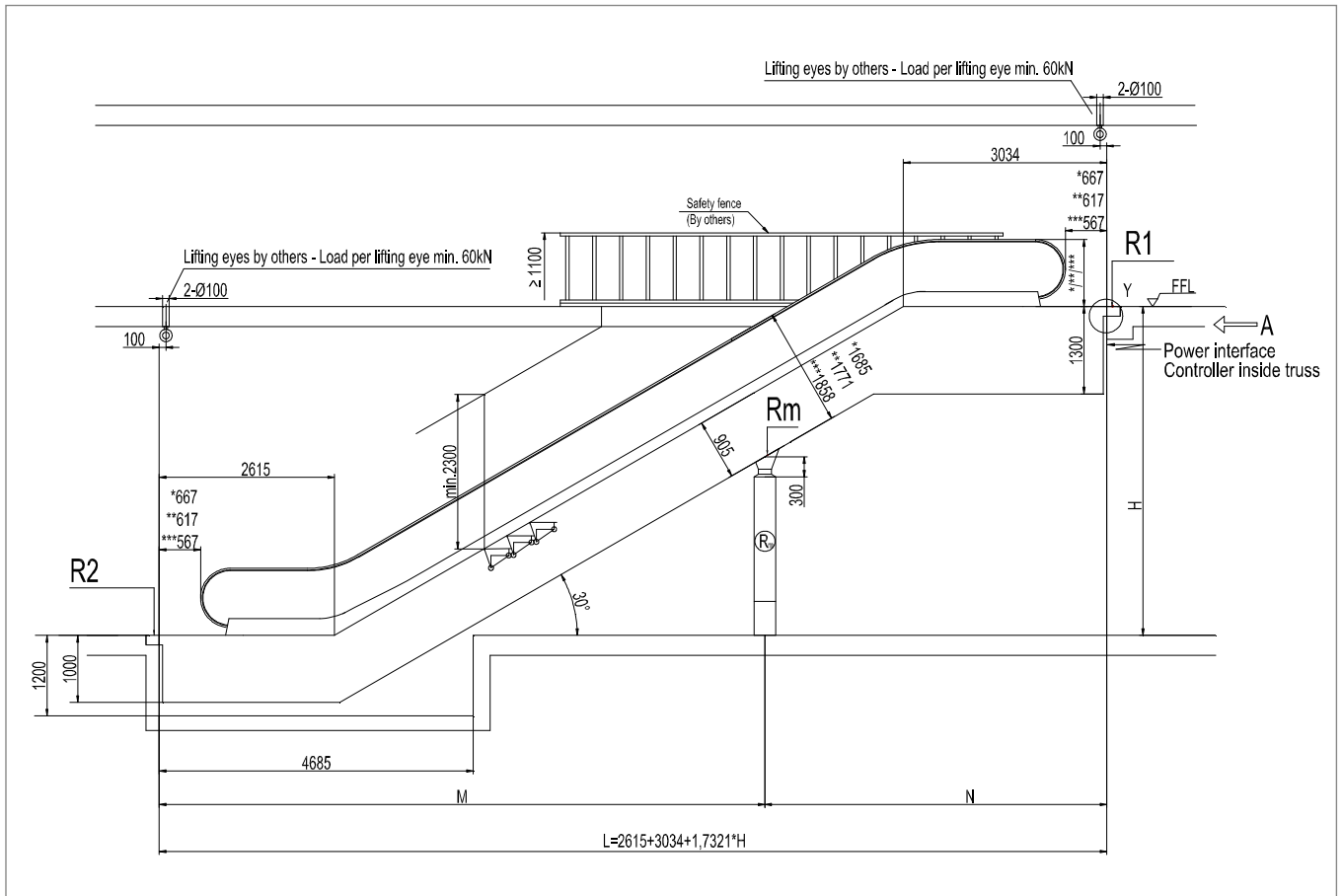
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# KONE TravelMaster™ 110 planning dimensions

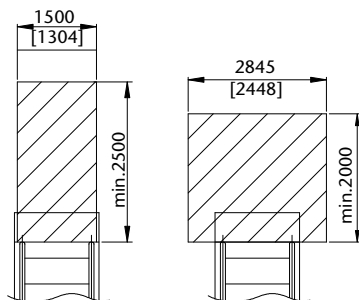
Architectural planning data

**30° inclination / 1.5 transition radii / 3 horizontal steps at each landing**

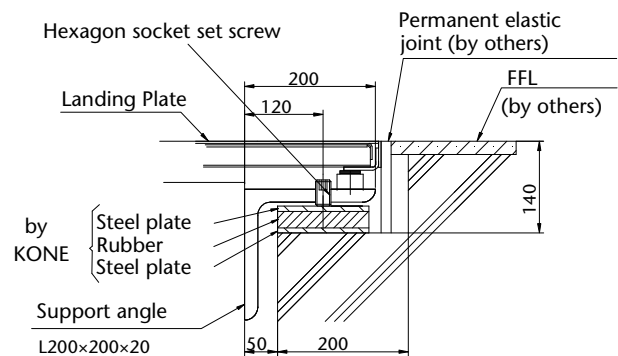
Code: EN 115-1:2008<sup>1)</sup>



Passenger Circulation Area Requirements



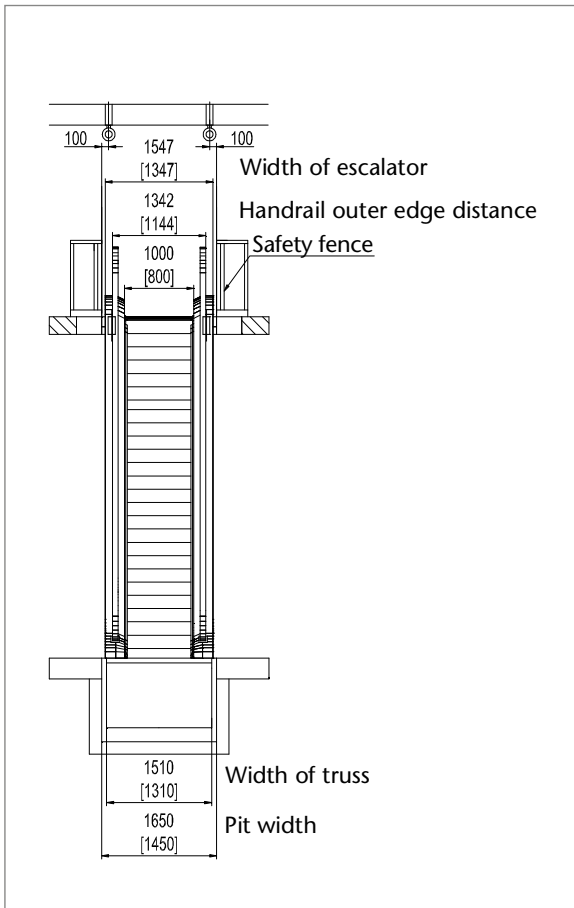
Detail Y (Mirror image of X)



Reaction force (kN)

	800 mm step width		1000 mm step width	
	$L > 16370$ mm	$R1 = 4.8 \cdot N$	$R2 = 4.8 \cdot M$	$R1 = 4 \cdot N$
	$Rm = 5.5L/1000 + 38$		$Rm = 5.5L/1000 + 38$	
$L \leq 16370$ mm	$R1 = 4.8L/1000 + 11.3$	$R2 = 4.8L/1000 + 3.1$	$R1 = 5.5L/1000 + 11.9$	$R2 = 5.5L/1000 + 3.3$

<sup>1)</sup> Other local codes dimensional requirements are available upon request, please contact your local KONE Sales representative for more information.



Position of intermediate support	
Span (mm)	M (mm)
16371 - 19330	9053 + X
19331 - 21410	10092 + X
21441 - 23490	11131 + X

X = truss extension at bottom

- All dimensions are in millimeters
- Maximum vertical rise: H = From 6 m to 9.5 m
- Upper truss extension maximum 700 mm
- Lower truss extension maximum 700 mm
- Intermediate support starting from L > 16370 mm
- Additional cladding material maximum 15 kg/m<sup>2</sup>
  - \* = Balustrade height 900 mm
  - \*\* = Balustrade height 1000 mm
  - \*\*\* = Balustrade height 1100 mm
- (XXX) = Step width 800 mm
- For escalator with step width of 600 mm please contact your KONE sales office

Note:

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KONE provides innovative and eco-efficient solutions for elevators, escalators and automatic building doors. We support our customers every step of the way; from design, manufacturing and installation to maintenance and modernization. KONE is a global leader in helping our customers manage the smooth flow of people and goods throughout their buildings.

Our commitment to customers is present in all KONE solutions. This makes us a reliable partner throughout the life-cycle of the building. We challenge the conventional wisdom of the industry. We are fast, flexible, and we have a well-deserved reputation as a technology leader, with such innovations as KONE MonoSpace®, KONE MaxiSpace™, and KONE InnoTrack™. You can experience these innovations in architectural landmarks such as the Trump Tower in Chicago, the 30 St Mary Axe building in London, the Schiphol Airport in Amsterdam and the Beijing National Grand Theatre in China.

KONE employs over 34,000 dedicated experts to serve you globally and locally in over 50 countries.

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